

Optical Generic Switch Panel**ABSTRACT**

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A switch panel having a touch plate, image generator, and imaging system. The touch plate includes an optically transparent layer having first and second sides. The optically transparent layer having an index of refraction greater than that of air. A light source
10 generates a light signal that is reflected between the first and second sides of the touch plate within the transparent layer. The imaging system records an image of the first surface. An image generator displays an image that includes a plurality of button positions to a person viewing the touch plate from the first side. A portion of the light signal is reflected toward the
15 second surface at an angle greater than the critical angle in the optically transparent layer when the first surface is touched. The imaging system determines the location of the touch from the location of the reflected light.